

Claims

- [c1] 1.A camera system comprising:
a pole, said pole having a camera end and an actuator end;
a camera mount assembly mounted to said camera end of said pole for mounting of a camera; and
an actuator mounted to said actuator end of said pole to move said camera.
- [c2] 2.The camera system of claim 1, wherein said camera mount assembly comprises:
a pole base mounted to said camera end of said pole;
a camera base for mounting of said camera;
a link connected between said pole base and said camera base to allow rotation of said camera base about said pole base;
a tendon cable attached between said actuator and said camera base to pull on said camera base and rotate said camera base about said pole base;
a spring inside said pole base and said camera base, said spring interconnecting said pole base and said camera base, said spring acting as a return, whereby said spring stretches when said tendon pulls on said camera base and recoils to pull said camera base back to an original position when said tendon cable is released from pulling on said camera base.
- [c3] 3.The camera system of claim 2, wherein said tendon cable is attached to a harness connector of a wiring harness; wherein wiring for said camera is part of an actuator cable connected between said actuator and said harness connector; wherein movement of said actuator pulls on said actuator cable which pulls on said harness connector, which in turn pulls said tendon cable; wherein said tendon cable and wiring harness are internal to said pole and pole base; and wherein said pole base and camera base both include a tendon slot which are aligned with each other to provide an area for said tendon cable to lie, so that said tendon cable does not catch on objects during movement of said pole.
- [c4] 4.The camera system of claim 2, wherein said pole base and camera base both include a link slot which are aligned with each other to provide an area for said link to lie, so that said link does not catch on objects during movement of said

pole and wherein said link is rotatably connected between said pole and camera bases by two connection points, such that as said tendon cable pulls on said camera base, the camera base rotates about two rotational points at said connection points between said link and said pole and camera bases.

[c5] 5.The camera system of claim 2, wherein said spring is a length that runs from inside said camera base, through said pole base and into part of said pole, such that as said spring stretches, said spring does not pull out of said pole base during rotation of said camera base.

[c6] 6. The camera system of claim 2, wherein said pole is a telescopic pole, which can be reduced in size for transport.

[c7] 7.The camera system of claim 3, wherein said pole base and camera base both include a link slot which are aligned with each other to provide an area for said link to lie, so that said link does not catch on objects during movement of said pole and wherein said link is rotatably connected between said pole and camera bases by two connection points, such that as said tendon cable pulls on said camera base, the camera base rotates about two rotational points at said connection points between said link and said pole and camera bases.

[c8] 8.The camera system of claim 7, wherein said spring is a length that runs from inside said camera base, through said pole base and into part of said pole, such that as said spring stretches, said spring does not pull out of said pole base during rotation of said camera base.

[c9] 9. The camera system of claim 8, wherein said pole is a telescopic pole, which can be reduced in size for transport.

[c10] 10.The camera system of claim 8, where said link slots and said tendon slots are the same slots respectively on each of said pole and camera bases.

[c11] 11.The camera system of claim 1, wherein said actuator is a shaft internal to actuator end of said pole and connected to said camera by an actuator cable to cause movement of said camera; and wherein said shaft includes a handle to allow said shaft to be push and pulled inside said pole to control movement of

said camera.

- [c12] 12.The camera system of claim 11, wherein said shaft includes a collar end and a cam end; wherein said cam end is closest to said camera; wherein said cam end includes a cam rotatably attached to said cam end; wherein said cam has an outside diameter rotatably positioned offset from a center of an outside diameter of said pole; and wherein said outside diameter of said shaft and cam are size slightly smaller than an inside diameter of said pole such that by twisting said shaft in said pole, said cam remains in position due to frictional forces between said inside diameter of said pole and said cam and in effect jams said shaft in a locked position with said pole.
- [c13] 13. The camera system of claim 11, wherein said shaft is hollow to allow said actuator cable to pass; wherein said collar end includes a slot; and further including a fastener to squeeze said collar end together at said slot to hold said actuator cable in position.
- [c14] 14. The camera system of claim 11, further including a collar which is attached over said collar end to act as said handle and said fastener.
- [c15] 15. The camera system of claim 13, further including an adjustment handle on said collar to allow quick release of pressure applied by said collar on said shaft.
- [c16] 16.The camera system of claim 2, wherein said actuator is a shaft internal to actuator end of said pole and connected to said camera by an actuator cable to cause movement of said camera; and wherein said shaft includes a handle to allow said shaft to be push and pulled inside said pole to control movement of said camera.
- [c17] 17.The camera system of claim 16, wherein said shaft includes a collar end and a cam end; wherein said cam end is closest to said camera; wherein said cam end includes a cam rotatably attached to said cam end; wherein said cam has an outside diameter rotatably positioned offset from a center of an outside diameter of said pole; and wherein said outside diameter of said shaft and cam are size slightly smaller than an inside diameter of said pole such that by twisting said shaft in said pole, said cam remains in position due to frictional

forces between said inside diameter of said pole and said cam and in effect jams said shaft in a locked position with said pole.

- [c18] 18. The camera system of claim 16, wherein said shaft is hollow to allow an actuator cable to pass; wherein said collar end includes a slot; and further including a fastener to squeeze said collar end together at said slot to hold said actuator cable in position.
- [c19] 19. The camera system of claim 16, further including a collar which is attached over said collar end to act as said handle and said fastener.
- [c20] 20. The camera system of claim 18, further including an adjustment handle on said collar to allow quick release of pressure applied by said collar on said shaft.
- [c21] 21. The camera system of claim 2, wherein said tendon cable is attached to a harness connector of a wiring harness; wherein wiring for said camera is part of an actuator cable connected between said actuator and said harness connector; wherein movement of said actuator pulls on said actuator cable which pulls on said harness connector, which in turn pulls said tendon cable; wherein said tendon cable and wiring harness are internal to said pole and pole base; and wherein said pole base and camera base both include a tendon slot which are aligned with each other to provide an area for said tendon cable to lie, so that said tendon cable does not catch on objects during movement of said pole; wherein said pole base and camera base both include a link slot which are aligned with each other to provide an area for said link to lie, so that said link does not catch on objects during movement of said pole; wherein said link is rotatably connected between said pole and camera bases by two connection points, such that as said tendon cable pulls on said camera base; wherein the camera base rotates about two rotational points at said connection points between said link and said pole and camera bases; wherein said spring is a length that runs from inside said camera base, through said pole base and into part of said pole, such that as said spring stretches, said spring does not pull out of said pole base during rotation of said camera base; wherein said actuator is a shaft internal to actuator end of said pole and connected to said camera by an actuator cable to cause movement of said camera; wherein said shaft

includes a handle to allow said shaft to be push and pulled inside said pole to control movement of said camera; wherein said shaft includes a collar end and a cam end; wherein said cam end is closest to said camera; wherein said cam end includes a cam rotatably attached to said cam end; wherein said cam has an outside diameter rotatably positioned offset from a center of an outside diameter of said pole; wherein said outside diameter of said shaft and cam are size slightly smaller than an inside diameter of said pole such that by twisting said shaft in said pole, said cam remains in position due to frictional forces between said inside diameter of said pole and said cam and in effect jams said shaft in a locked position with said pole; wherein said shaft is hollow to allow said actuator cable to pass; wherein said collar end includes a slot; further including a fastener to squeeze said collar end together at said slot to hold said wiring cable in position; further including a collar which is attached over said collar end to act as said handle and said fastener; and further including an adjustment handle on said collar to allow quick release of pressure applied by said collar on said shaft.

[c22] 22. The camera system of claim 21, wherein said pole is a telescopic pole, which can be reduced in size for transport.

[c23] 23. The camera system of claim 21, where said link slots and said tendon slots are the same slots respectively on each of said pole and camera bases.